Claims 37, 42-43 and 48 were rejected under 35 U.S.C. § 102 (b) as being anticipated by Allen et al. (U.S. Patent No. 5,394,458). Claims 38-41 and 44-47 were rejected under 35 U.S.C. § 103 (a) as being obvious over Allen et al. in view of Baum et al. (U.S. Patent No. 5,577,105). Claims 37, 42-43 and 48 were rejected under 35 U.S.C. § 103 (a) as being obvious over Ulinski (U.S. Patent No. 5,325,156). Claims 38-41 and 44-47 were rejected under 35 U.S.C. § 103 (a) as being obvious over Ulinski in view of Baum et al.

The Interview granted by Examiner Vu, with inventor Dr. Motoyama, on November 5, 1999 is hereby gratefully acknowledged. In the course of this interview the essential aspects of the present invention were summarized and the Allen et al. and Ulinski references were discussed as were the rejections of the claims. Applicant suggested the term "protocol identifier" as a proposed amendment to Claim 37 to replace the recited "communication protocol" language. Examiner Vu agreed to review a proposed draft claim to be faxed to her for reaching an agreement with the examiner prior to filing of a response. Applicant faxed two draft claims to Examiner Vu on November 9, 1999.

Before discussing in detail the rejections of the claims, it is believed that a brief recapitulation of some of the significant aspects of the present invention is in order. The present invention is directed to a method, system and program product which allows a remote monitoring and diagnostic computer or system to communicate using different communication protocols which are stored within a data base. After a communication is received, it is analyzed to determine if there is a protocol identifier. If the protocol identifier exists, a data base is searched to determine the format of the header of the communication. Once the format of the header is determined, the header of the received communication is read to determine the information contained therein. This information is utilized to determine the actual format of the data which follows. The machine to which the remote monitoring

and diagnostic system is connected is a business office device such as a copier, printer, or facsimile machine, a digital camera, or another type of device.

Attention is first directed to the rejection of Claim 37 under 35 U.S.C. § 102 (b) as being anticipated by Allen et al., which is directed to a reproduction apparatus including a communication interface having an RS-232 interface and a modem, thereby permitting both on-site and remote communication with a diagnostic and administrative device. The RS-232 interface and modem enable the use of standard hardware and non-dedicated telephone lines for the purpose of recording apparatus usage, feature utilization, and performing diagnostic routines on the reproduction apparatus.[1] Signal transfer to the modem 4 occurs using the *standard RS-232 protocol*, including both an asynchronous data signal and data transmit and received signals so that the presence of the modem is transparent to the reproduction apparatus. Thus, reproduction apparatus 1 and device 5 communicate as if they were directly connected together on an RS-232 line. Preferably, modem 4 is Hayes compatible and capable of transmitting and receiving data at a rate of at least 1200 baud. Modem 4 may be mounted on the communications interface 6 circuit board within the reproduction apparatus or mounted externally thereof. Because modem 4 converts the RS-232 format signals utilized by the communications control and memory 7 of the communications interface 6 into analog signals suitable for transmission over an ordinary telephone line, and conversely converts analog signals received from the telephone line into standard RS-232 format signals, it is possible to connect diagnostic and administrative device 5 to reproduction apparatus machine control and diagnostic circuitry 2 either on-site or via a non-dedicated telephone system. Thus, device 5 may take the form of a laptop or portable computer with an internal modem or

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[1] See Abstract.

storage medium such as a magnetic disk drive.[2]

According to the Official Action, "The information is transmitted from the reproduction apparatus 1 to the administrative device 5 via a telephone network and a modem 4, which uses a standard RS-232 protocol (determined protocol), column 3, line 30 to column 4, line 7."[3] Amended Claim 37 now recites "determining, by the second device, a protocol identifier utilized by the first device, and parsing, by the second device, the information transmitted by the first device using the protocol identifier which has been determined." It is respectfully submitted that Allen et al. does not disclose or suggest the second device determining a *protocol identifier* utilized by the first device, and the second device parsing the transmitted information using the protocol identifier which has been determined, but instead only discloses using a *predetermined* hardware level standard transmission protocol such as RS-232 for transmission of information. Thus, it is believed that amended independent Claim 37 is not anticipated by Allen et al.

Substantially the same arguments as set forth above apply to amended dependent Claim 42, which depends from Claim 37. It is respectfully submitted that dependent Claim 42 specifies additional features of the present invention which are not disclosed by Allen et al.

Similarly, amended independent Claim 43 and amended dependent Claim 48 are believed to be allowable over Allen et al. for the same reasons as discussed above with regard to Claims 37 and 42.

Attention is now directed to the rejection of Claims 38-41 and 44-47 under 35 U.S.C. § 103 (a) as being obvious over Allen et al. in view of Baum et al. The Official Action relies

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[2] See col. 3, line 51 - col. 4, line 7.

[3] See Official Action, Page 2, lines 19-21.

on Allen et al. as disclosing the claimed subject matter as discussed above, except for including a plurality of protocols.[4] However, as discussed previously with regard to independent Claims 37 and 43, the claimed "determining, by the second device, a protocol identifier utilized by the first device, and parsing, by the second device, the information transmitted by the first device using the protocol identifier which has been determined" is not disclosed or suggested by Allen et al. It is respectfully submitted that the combination of Allen et al. in view of Baum et al. also does not disclose or suggest this feature as claimed. Thus, it is believed that dependent Claims 38-41 and 44-47 are allowable over Allen et al. in view of Baum et al.

Attention is now directed to the rejection of Claims 37, 42-43 and 48 under 35 U.S.C. § 103 (a) as being obvious over Ulinski. According to the Official Action, "Ulinsky does not explicitly disclose the use of a communication protocol,"[5] and "it would have been obvious to one of ordinary skill in the art at the time the invention was made for the system in Ulinsky to communicate with the remote diagnostic site by using *predetermined protocol* because the modem in Ulinsky would have included a communication protocol for transmitting and receiving information between the reproduction apparatus and the remote diagnostic site."[6] However, amended independent Claims 37 and 43 do not recite a *predetermined protocol* for transmitting information but instead recite a *protocol identifier*[7] which is not disclosed or suggested by Ulinski. Thus, it is believed that independent Claims 37 and 43, and their respective dependent Claims 42 and 48, are allowable over Ulinski.

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[4] See Official Action, Page 3, lines 11-12.

[5] See Official Action, Page 4, line 17.

[6] See Official Action, Page 5, lines 2 - 6.

[7] See, for example, Figure 6, element 262 and Figure 7, and specification , page 17, lines 8-21 and page 18, lines 8-23.

Attention is now directed to the rejection of Claims 38-41 and 44-47 under 35 U.S.C. § 103 (a) as being obvious over Ulinski in view of Baum et al. The Official Action relies on Ulinsky as disclosing the claimed subject matter as discussed above, except for including a plurality of protocols.[8] However, as discussed previously with regard to independent Claims 37 and 43, the claimed "protocol identifier" is not disclosed or suggested by Ulinsky. It is respectfully submitted that the combination of Ulinsky in view of Baum et al. also does not disclose or suggest this feature as claimed. Thus, it is believed that Claims 38-41 and 44-47 are allowable over Ulinsky in view of Baum et al.

New Claims 49-56 are also believed to be allowable over the prior art of record.

No new matter is added by way of this amendment.

In view of the foregoing comments, it is respectfully submitted that the invention defined by Claims 37-56 is patentable, and a swift and favorable reconsideration of this application is therefore requested.

Respectfully submitted,

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[8] See Official Action, Page 3, lines 11-12.